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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

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THACKER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Application No. 09/356,997

Applicant(s)

Thacker et al.

Examiner

Office Action Summary

Group Art Unit 2758 Saleh Najjar



🔀 Responsive to communication(s) filed on	
☐ This action is FINAL.	
Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay/1835 C.D. 11; 453 O.G. 213.	osecution as to the merits is closed
A shortened statutory period for response to this action is set to expire3m longer, from the mailing date of this communication. Failure to respond within the period application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained as TCFR 1.136(a).	od for response will cause the
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s)	is/are withdrawn from consideration
Claim(s)	is/are allowed.
	is/are rejected.
	is/are objected to.
☐ Claims are su	bject to restriction or election requirement.
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on	
Attachment(s)	
 Notice of References Cited, PTO-892 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413 ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Notice of Informal Patent Application, PTO-152 	Sallning
SEE OFFICE ACTION ON THE FOLLOWING PAG	GES

- 1. This action is responsive to the application filed on July 20, 1999. Claims 1-12 are pending examination. Claims 1-8 represent an apparatus directed toward a Internet cache content delivery via a data distribution system. Claims 9-12 represent method claims directed toward the same.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humphrey, U.S. Patent No. 5,987,233.

Humphrey teaches the invention substantially as claimed including a satellite broadcasting system combined with servers known as cache or proxy servers located at the client at client site which serve to store data from the network until the client requests the data and a master cache center which coordinates the selection and transmission of information to the cache sites (see abstract).

4. As to claim 1, Humphrey teaches a caching system for use with a data distribution system, comprising:

a master cache for receiving content for distribution by the data distribution system to one or more users (see fig. 2; col. 4, Humphrey discloses master cache 21 that stores content to be distributed to local caches);

a satellite link for receiving content that is distributed by the data distribution system from the master cache (see fig. 2; col. 4);

one or more local caches for storing the content received by the gateway destined for the one or more users (see fig. 2; col. 4, Humphrey discloses local caches 25 that receive content from master cache through satellite link);

harvesting software coupled to the master cache and the uplink for processing information corresponding to probability distributions that the local caches satisfy requests from their respective users to predictively distribute the desired content to the respective users (see col. 5, lines 15-35, Humphrey discloses that the master cache records all the information regarding the miss and measures the amount of interest in the information or data from the local caching system).

Humphrey does not explicitly disclose a gateway connected to the master cache.

However, "Official Notice" is taken that the concept and advantages of using a Gateway to connect a resource distribution network to a subscriber or client network is old and well known in the network communication art.

Therefore, it would have been obvious to on of ordinary skill in the art at the time of the invention to modify Humphrey by replacing the uplink with a gateway server to connect the local cache with the master cache center. One would be motivated to modify Humphrey by including a gateway that connects the local caching system to the master cache system to allow data to flow between different networks.

5. As to claim 2, Humphrey teaches a caching system for use with a data distribution system as in claim 1 above, wherein the harvesting software processes information contained in transmit hit/miss data and probability tables generated at the master cache (see col. 5, Humphrey discloses that the cache adapter 27 reports to the master cache information regarding the miss of data requested by clients which is recorded at the master cache).

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6. As to claims 3-4, Humphrey teaches a caching system for use with a data distribution system as in claim 1 above.

Humphrey does not explicitly disclose the limitation of HTTP and NTTP objects. Humphrey does disclose that the content distributed by the master cache is Internet content.

"Official Notice" is taken that the concept and advantages of distributing HTTP or NTTP objects to data networks is old and well known in the network communication art. Therefore, it would have been obvious too one of ordinary skill in the art at the time of the invention to modify Humphrey to include HTTP and NTTP objects in the data distributed by the master cache 21 since. One would be motivated to do so since HTTP and NTTP objects are well known and familiar formats for information on the Internet.

- 7. Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. As to claim 9, Humphrey teaches a method for transferring content distributed by a data distribution system to a cache adapter into a local cache, comprising the steps of:

indicating that content has arrived at the cache adapters 27 (see col. 5, Humphrey discloses that when content arrives at the satellite receivers 26, data is transferred tot eh cache adapters 27 which request cache 28 to retrieve the content available);

enabling the cache adapters as a cache of the local cache during the transfer

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process (see col. 5, Humphrey discloses that the cache adapters receive content from satellite receivers, then request the local cache to retrieve the content);

verifying that content has been transferred to the local cache during the transfer process (see col. 5, Humphrey discloses that the cache adapters 27 request that the local cache find the content needed by the local cache);

disabling the cache adapter as a cache of the local cache at the end of the

transfer process (see col. 5, Humphrey discloses that the cache adapters do not store information after the content is delivered to local cache 28); causing the local cache to retrieve the content from the cache adapter until all content has been transferred (see col. 5, Humphrey discloses that the cache adapters receive content from satellite receivers, then request the local cache to retrieve the content).

Humphrey does not explicitly disclose a gateway connected to the master cache.

However, "Official Notice" is taken that the concept and advantages of using a Gateway to connect a a resource distribution network to a subscriber or client network is old and well known in the network communication art.

Therefore, it would have been obvious to on of ordinary skill in the art at the time of the invention to modify Humphrey by replacing the uplink with a gateway server to connect the local cache with the master cache center. One would be motivated to modify Humphrey by including a gateway that connects the local caching system to the master cache system to allow data to flow between different networks.

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- **9.** Claims 10-12 do not teach or define any new limitations above claims 1-4, and 9 and therefore are rejected for similar reasons.
- **10.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Saleh Najjar

Examiner Art Unit 2758

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